

# Run-5 update

- □ Sectors warm-up
- □ RHIC beam set-up blue
- Work during interruption

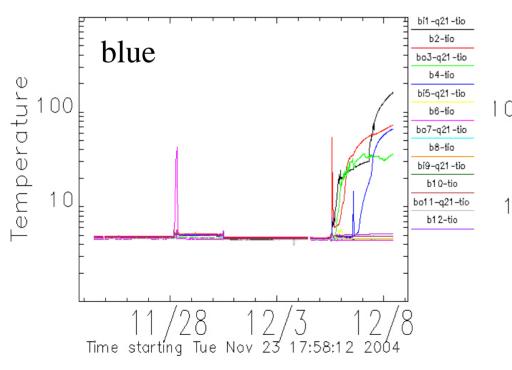


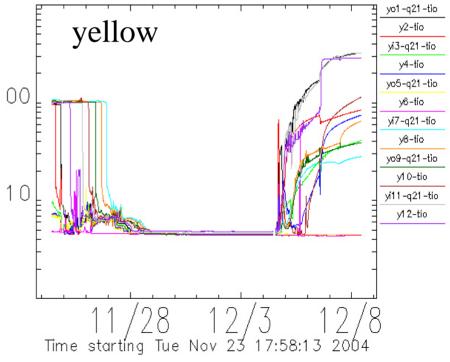
# Warm-up plans, update

|         | Blue        |                    | Yellow      |                    |  |
|---------|-------------|--------------------|-------------|--------------------|--|
| Sextant | Magnet Line | <b>Heat Shield</b> | Magnet Line | <b>Heat Shield</b> |  |
| 6/7     | Cooled      | Cooled             | Drift       | Cooled             |  |
| 4/5     | Cooled      | Cooled             | Cooled      | Cooled             |  |
| 2/3     | Drift       | Cooled             | Drift       | Cooled             |  |
| 12/1    | Warm        | Warm               | Warm        | Warm               |  |
| 10/11   | Cooled      | Cooled             | Warm        | Warm               |  |
| 8/9     | Cooled      | Cooled             | Drift       | Cooled             |  |
|         |             |                    |             |                    |  |
|         |             |                    |             |                    |  |

Still waiting to have the relevant sectors at room temperature (limitations of cryo system)
Repair not started yet
No firm estimate yet

Cooled- actively cooled by main refrigerator at normal operating temperature
Drift - Not actively cooled or warmed however maintained at low pressure
Warm- warmed to room temperature for repair







# Status Injectors

Injector in shut-down now

Re-start will be decided when RHIC schedule becomes more clear....

- ✓ Intensity
- ✓ Transverse emittance

Open issue:

Longitudinal emittance

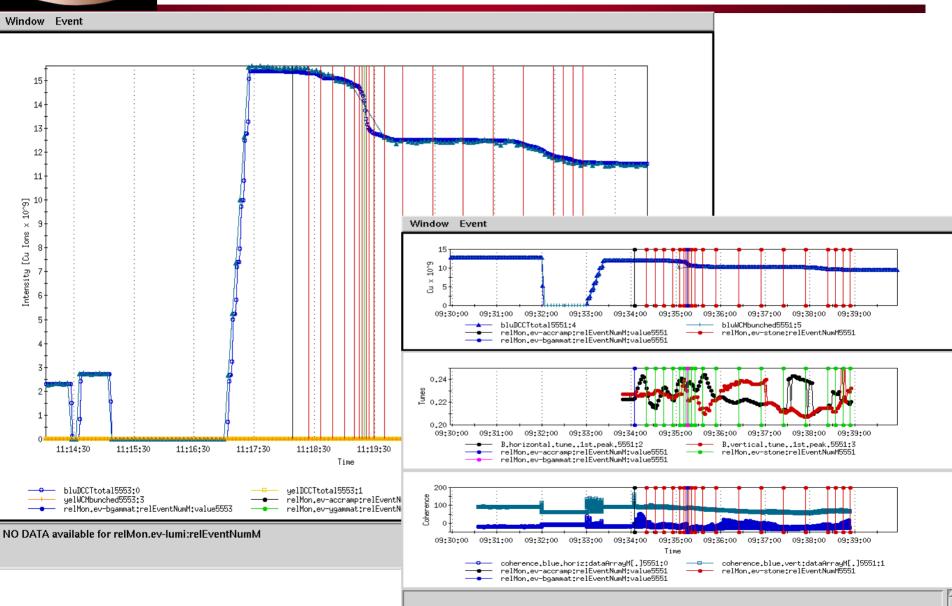


### **BLUE** set-up with beam - highlights

- □ Reproducible, tuned injection (after debugging, tuning, etc.)
- □ Instrumentation set-up in blue BPMS, TuneMeter, WCM, BLM, PLL, Schottky, coherence, IPM
- RF set-up
- Initial vacuum tests
   commissioning of SkewMod, test orbit feed-back
- Ramps: beam at store with initial tuning
  - ~ 80-90 % transmission at transition Orbit, tunes, chromaticity, coupling at store

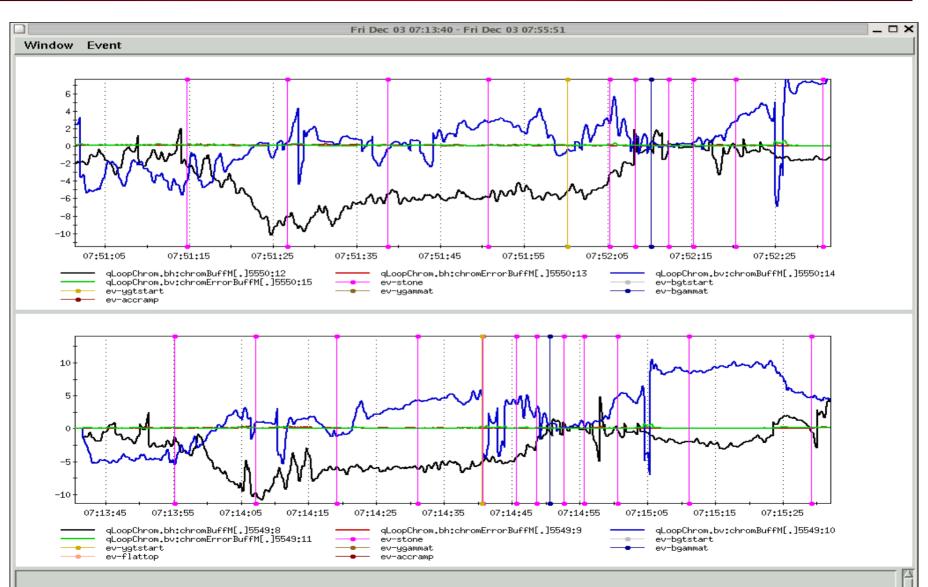


### Ramps Friday Dec 3 owl & day



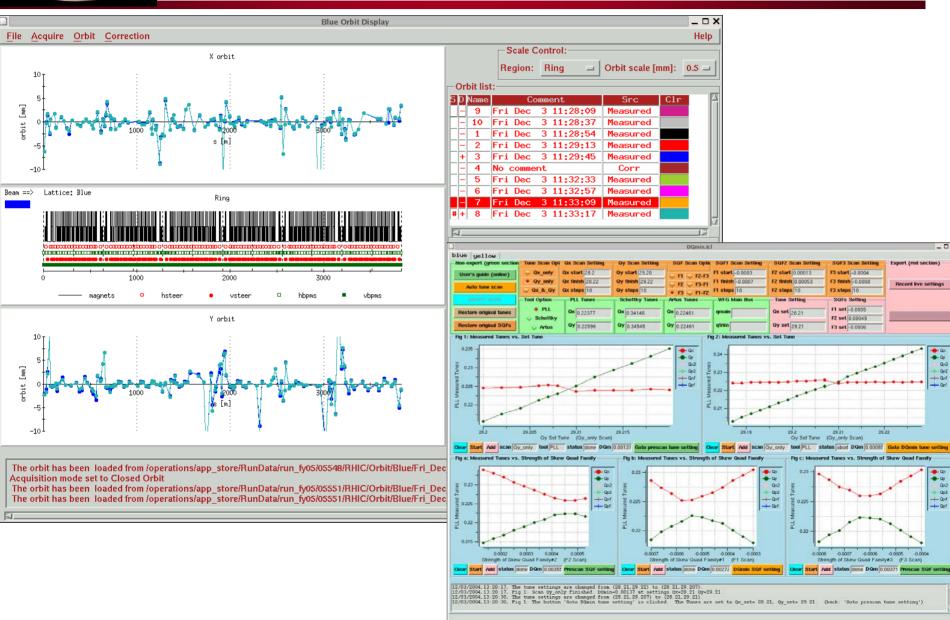


## Ramp chromaticity





#### Blue store tune-up





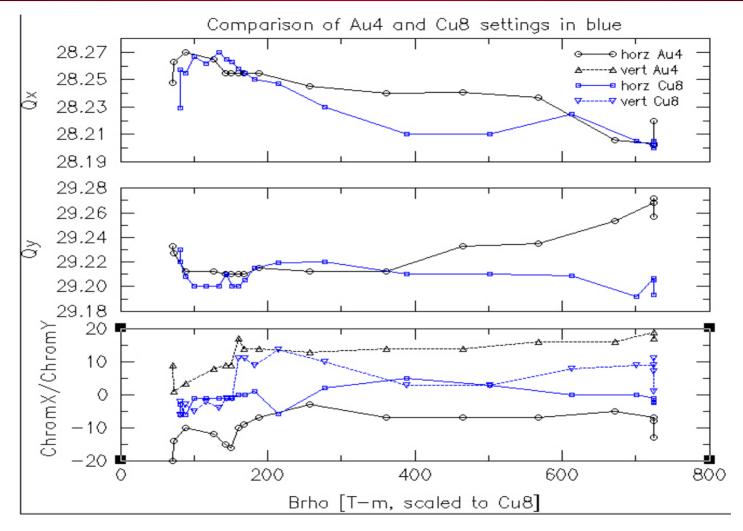
#### Run-5 activity during interruption

- □ PS repairs IR12, IR10
- Ramp analysis (Todd, Steve, Fulvia,....)analysis blue ramp
  - → yellow, get a good starting point
- Experiments magnets



## Ramp analysis – 1

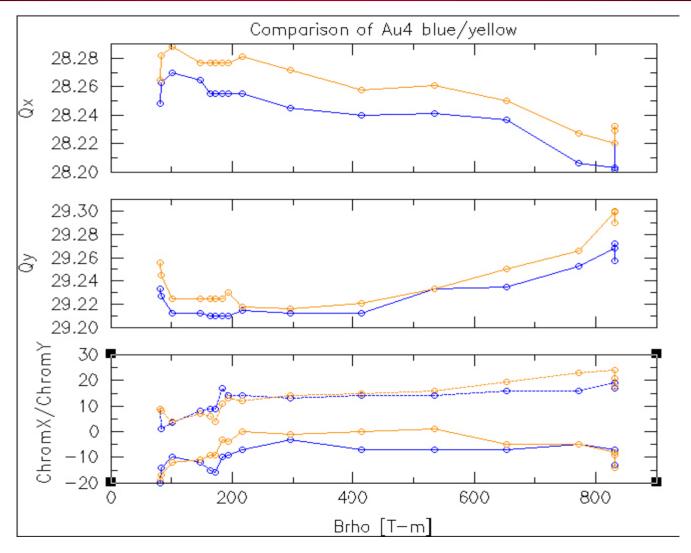
(Todd)



Better tune and chromaticity predictions by model this year



## Ramp analysis - 2



Possible to use ramp information from blue for yellow start-up